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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/807,574 | 03/18/2004 | Christopher R. Karabin | 95,872 | 4133 |

7590 01/14/2005

Office of Counsel Code OC4
Naval Surface Warfare Center
Indian Head Division
101 Strauss Ave., Bldg. D-31
Indian Head, MD 20640-5035

EXAMINER

ISSING, GREGORY C.

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3662

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/807,574

Applicant(s)

KARABIN ET AL.

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 10-17 are indefinite since certain of the claims are dependent upon themselves, e.g. 10, 11, 12, 14, and 15. Claims 13, 16 and 17 are dependent upon indefinite claims.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Stotts et al.

The rejection is set forth in the previous Office Action.

The applicants argue that the claimed subject matter is not shown by Stotts et al because Stotts et al does not contemplate "real-time" data transfer and use. This is not convincing as the applicants fail to argue claim limitations. Moreover, the buoys record the impact data as well as their own position from an onboard GPS receiver and communicate such to a central station via an aircraft which additionally provides position correction in the form of differential positioning. The processing of Stotts et al require the detection, recordation, and communication of information from each buoy to a central processing unit in a manner similar to the claimed subject matter wherein the buoy captures an acoustic signature, determines position, communicates the signature and position/time data to a system controller. Applicants argue that a completely different calculation method is disclosed in Stotts et al. Again applicants fail to show how the claim language distinguishes over the prior art and as such the argument is not persuasive. Both the reference and the application refer to radio triangulation using timing signals received at known cites. Applicants argue that Stotts et al do not disclose any automated system for buoy recovery, however, the aircraft relaying the information to the central station processes the buoy position data relative to

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itself and therefore knows the range and bearing between itself and each buoy which would allow recovery if so desired, and envisioned via the fact that some of the buoys were recovered; thus, the applicants' argument is not convincing. Applicants argue that there is no calculation for accumulated error as set forth in claims 7 and 16. This is not convincing since in Section IV, Stotts et al suggest corrections for buoy drift which is not seen to be different from the accumulated error in relation to each buoy signature. Applicants argue that Stotts et al do not disclose any controller scheme for a system to conduct "live" firing missions or simulations as set forth in claims 7-19.. This is not convincing since it fails to address particular claim language and it is not understood how the simulations of Stotts et al are not simulations as claimed.

6. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Landis.

The rejection is set forth in the previous Office Action.

7. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunaway.

The rejection is set forth in the previous Office Action.

8. Due to the similarity of the references and the grouping of such references in the applicants' response, the two will be addressed together.

Applicants argue that the RF radio repeater of claims 1, 6, 8 and 17 is not disclosed in the references, the location scheme of claims 4, 5, and 7 is not disclosed in the references and the control system of claims 9-17 are not disclosed in the references. These arguments are not persuasive. Firstly, the buoys of the IMPASSE system communicate the data used to triangulate the impact point using radio frequency transmissions. Unless the applicants prove that the experiments performed during the cited simulations were not radio frequency signals, the applicants' arguments are not persuasive. The suggestion of satellite uplinking further clearly suggests the use of radio frequency signals. Secondly, the applicants' argument that the location scheme is not disclosed is not convincing since it is deemed that such is inherent in the IMPASSE system of VAST. Applicants are required to show that the system of IMPASSE in VAST is not the same since

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IMPASSE measures acoustic signals and GPS positions and relays such information to a central processor for triangulating the impact position. If the applicants are of the opinion that the location scheme is different, then they should show how the location scheme of IMPASSE is not the same as the location scheme of the instant application rather than to merely submit that they are different. The communication from the buoys is a radio frequency signal and the buoys' conventional sensing is an acoustic sensor since the IMPASSE system uses the MASS buoys, whose datasheets are cited in the pertinent prior art and which include a buoy for detecting an acoustic event, and reporting the acoustic event, position and detection time via a spread spectrum radio signal to a base station wherein the information from a plurality of the MASS buoys are accumulated for processing for determining the impact point. Thus, the applicants' allegations are not persuasive.

9. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by either one of Erwin or Navy Newstand.

The rejection is set forth in the previous Office Action.

The applicants argue that these references do not disclose the RF radio repeater or the location scheme and therefore are not proper references. For reasons similar to above, the applicants' response is not convincing. Since each of the references disclose the use of the IMPASSE system and the IMPASSE system includes the use of the MASS as shown by Metaocean (cited in the pertinent prior art section of the previous Office Action, the claimed device and location scheme is deemed inherent. Applicants' argument fails to identify specific claim language and fails to show how the device of the instant application actually differs from the prior art. Applicants' merely conclusory statements are thus not persuasive and the claims stand rejected.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is 703-306-4156. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 703-306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Gregory C. Issing
Primary Examiner
Art Unit 3662

gci